|   | Application No.  | Applicant(s)  |
|---|--|---|
|   | 10/054,621   | KRUGER ET AL.   |
|   | Examiner   | Art Unit  |
| į,  | Paul D Kim   | 3729  |
| The MAILING DATE of this communication appea<br>All claims being allowable, PROSECUTION ON THE MERITS IS (Continuous previously mailed), a Notice of Allowance (PTOL-85) of NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOR of the Office or upon petition by the applicant. See 37 CFR 1.313 and 1.53 miles.                                       | OR REMAINS) CLOSED in this ap<br>r other appropriate communication<br>HTS. This application is subject to<br>the property of the communication in the communicatio | plication. If not included not will be mailed in due course. THIS |
| 1. This communication is responsive to <u>9/3/2004</u> .  |  |   |
| 2. The allowed claim(s) is/are <u>1-38</u> .  |  |   |
| 3. $\boxtimes$ The drawings filed on <u>18 January 2002</u> are accepted by the   | Examiner.  |   |
| 4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the:  1. Certified copies of the priority documents have be 2. Certified copies of the priority documents have be 3. Copies of the certified copies of the priority documents have be International Bureau (PCT Rule 17.2(a)).  * Certified copies not received: | neen received.<br>neen received in Application No  |   |
|   |  |   |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONME THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |  | complying with the requirements                                   |
| 5. A SUBSTITUTE OATH OR DECLARATION must be submitted informal patent application (PTO-152) which gives   |  |   |
| 6. CORRECTED DRAWINGS (as "replacement sheets") must I  | be submitted.  |   |
| (a) $\square$ including changes required by the Notice of Draftspersor  | n's Patent Drawing Review (PTO-  | 948) attached   |
| 1)  hereto or 2)  to Paper No./Mail Date  |  |   |
| (b)  including changes required by the attached Examiner's A<br>Paper No./Mail Date   | Amendment / Comment or in the C  | Office action of  |
| Identifying indicia such as the application number (see 37 CFR 1.84 each sheet. Replacement sheet(s) should be labeled as such in the   |  |   |
| 7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FO   |  |   |
|   |  |   |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892)   | E   Notice of Information  | latent Application (DTO 450)                                      |
| <ol> <li>□ Notice of References Cited (P10-692)</li> <li>□ Notice of Draftperson's Patent Drawing Review (PT0-948)</li> </ol>   |  | atent Application (PTO-152) (PTO-413)                             |
| 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08)  | Paper No./Mail Dat   | ie .  |
| Paper No./Mail Date   | _  |   |
| <ol> <li>Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol>   | 8. ⊠ Examiner's Stateme 9. ☐ Other   | ent of Reasons for Allowance                                      |
| or biological Material  | э. 🔟 Ouici   | Paul D Kim Examiner Art Unit: 3729                                |

U.S. Patent and Trademark Office PTOL-37 (Rev. 1-04) Application/Control Number: 10/054,621

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## **DETAILED ACTION**

This office action is a response to the amendment filed on 9/3/2004.

## Election/Restrictions

1. Since generic claims 1, 19 and 32 are allowable, claims 5-8, 10-18, 27-30 and newly submitted claims 31-38, directed to the making a magnetic head assembly method, previously restricted from the election of species, are now subject to bring rejoined. Claims 1-38 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Since all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement made in the Office action mailed on 3/23/2004 is hereby withdrawn.

## Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: Upon further consideration with applicant's arguments, examiner agrees with the applicant's counsel that the prior art of record of Ohtomo in view of Lyons fails to disclose the amended claimed invention such as ion beam sputtering a ferromagnetic material layer on the underlying layer and on the side and top surfaces of the shaping layer with the sputtering being directed at an angle to a normal to the flat surface (as per claims 1 and 32) and processes of forming a second photoresist layer with an edge which coincides with an edge site of said pole tip and reactive ion etching the masking layer and the first

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photoresist layer to form the masking layer and the first photoresist layer with said side surface for forming an edge of said pole tip (as per claim 19). Okazawa et al. teach a process for applying silicon oxynitride, which is not a ferromagnetic material, by chemical vapor deposition (CVD), which is not the ion beam sputtering. It is not obvious taken alone or in combination of other references fairly to suggest the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

- 3. Claims 1-38 are allowed.
- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356. The examiner can normally be reached on Tuesday-Friday between 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul D Kim

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